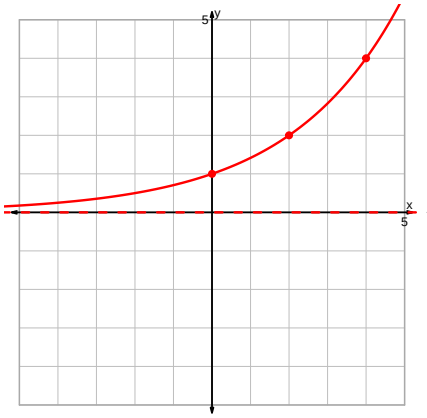
NAME: DATE:

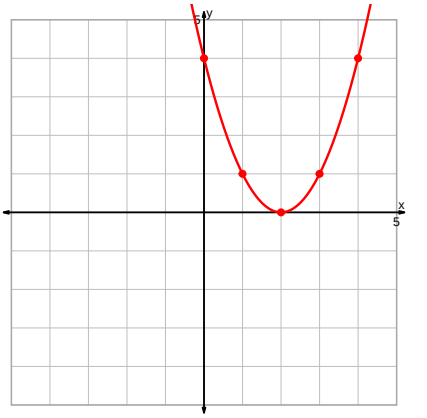
# Unit-2 Reduced Mastery Assessment (version 317)

**Question 1 (20 points)**

Graph the equations accurately. For each integer-integer point on the parent, indicate the corresponding point precisely. Also, with dashed lines, indicate any asymptotes.

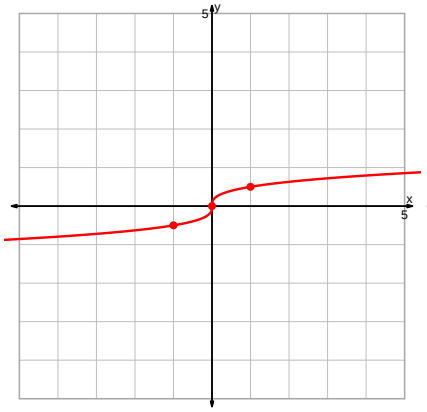
$y = 2^{\frac{x}{2}}$

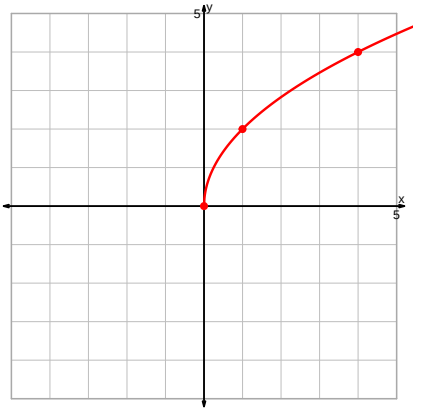



$y = (x-2)^2$

$y = \frac{\sqrt[3]{x}}{2}$

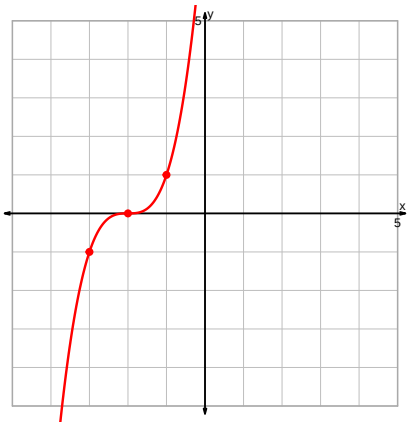


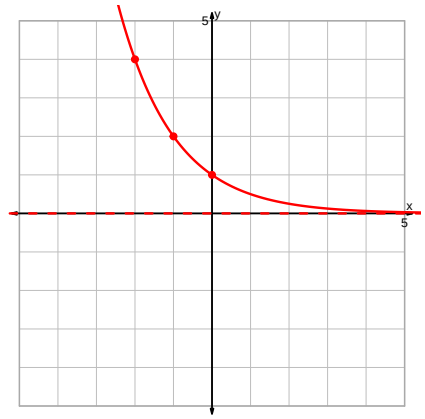




$y = 2 \cdot \sqrt{x}$

**Question 2 continued...**

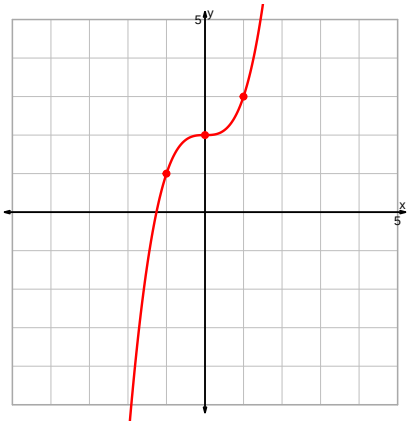
$y = \left(x+2\right)^3$

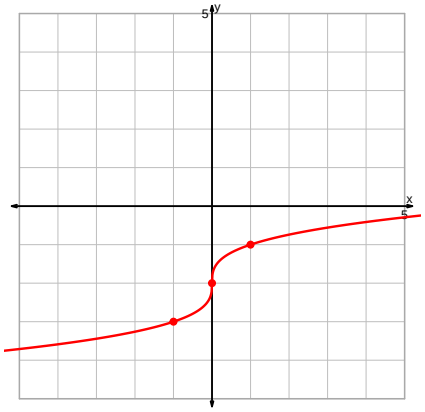



$y = 2^{-x}$

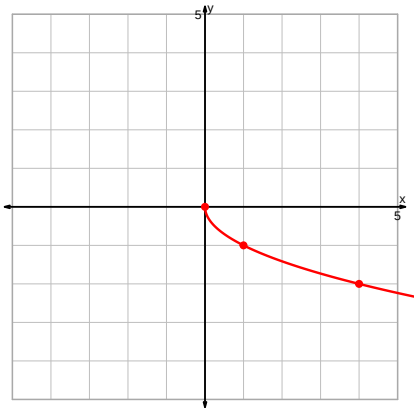
$y = x^3 + 2$

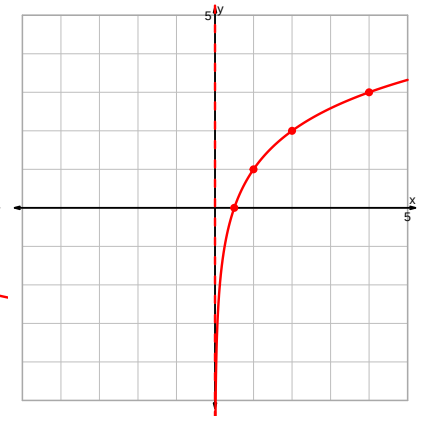



$y = \sqrt[3]{x} - 2$

$y = -\sqrt{x}$

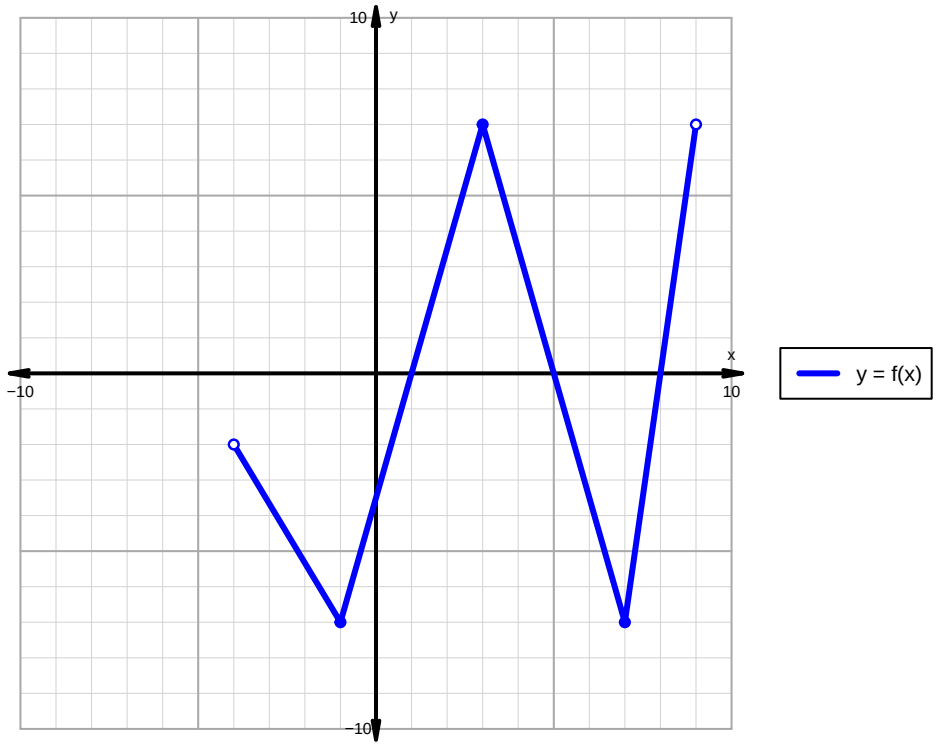



$y = \log_2\left(2x\right)$

**Question 2 (20 points)**

A function is graphed below.




Indicate the following intervals using interval notation.

| Feature | Where |
|---|---|
| Positive | $(1, 5) \cup (8, 9)$ |
| Negative | $(-4, 1) \cup (5, 8)$ |
| Increasing | $(-1, 3) \cup (7, 9)$ |
| Decreasing | $(-4, -1) \cup (3, 7)$ |
| Domain | $(-4, 9)$ |
| Range | $(-7, 7)$ |